modules arranged around a measuring area in the shape of a contiguous polygon which is placed opposite a single, non-rotating emitter.

8. (New) The semiconductor detector according to Claim 7, wherein said semiconductor substrate comprises:

a CdTe semiconductor.

9. (New) The semiconductor detector according to Claim 7, comprising:

a printed circuit board on which said single semiconductor substrate is provided and wherein the plurality of X-ray detection pixels formed on the semiconductor substrate is arranged along a longitudinal direction of said semiconductor substrate.

10. (New) The semiconductor detector according to Claim 9, wherein the plurality of X-ray detection pixels on said single semiconductor substrate is arranged in a line.

11. (New) The semiconductor detector according to any one of Claims 7 to 10, wherein the X-ray detection pixels comprise:

electrodes formed on the single semiconductor substrate by means of photolithography.

12. (New) A method for manufacturing a semiconductor detector for use in a high-speed X-ray CT, said method comprising the steps of:

obtaining a plurality of detector modules having a plurality of X-ray detection pixels on a single planar semiconductor substrate of each of the detector modules whose electrodes are made by photolithography;

arranging the plurality of said detector modules around the measuring area in the shape of a contiguous polygon; and

placing the arranged plurality of detector modules opposite a single, non-rotating emitter.